## DEPARTMENT OF WATER RESOURCES

## Real time/Forecasting Activities

- ➤ Data Collection and Preparation (Coordination with Interagency Ecological Program database manager to streamline data for real time/forecasting modeling)
  - Providing preliminary initial and boundary condition values on weekly (or as needed) basis for real time availability.
  - Developing procedures to address questionable or erroneous data.
  - Developing web based accessibility for ease of use.
  - Developing automated processes for input file preparation.
  - Identification of necessary data requirements for different models.

## > Data Utility Toolbox Development

- Pre-processing data tool (Vplotter) to assist in QA/QC of initial and boundary conditions.
- Developing techniques to fill in missing, questionable, or erroneous values of initial and boundary condition data sets and flag data as appropriate.
- Developing output tool(s) and standard graph formats for generating study reports.
- ➤ Model Development/Support/Implementation (DSM2 Hydro, Qual, and PTM)
  - Continuing model support for planning studies and implementing enhancements and modifications as needed.
  - Continuing BDMF participation (DCC gate scenario analysis).
  - Continuing IEP DSM2PWT calibration efforts (including geometry data enhancement).
  - Implementing parallel real time forecasting with DSM2 hydro and water quality analysis in Operations and Maintenance.
  - Implementing internal DWR real time/forecasting workgroup

## Recommendations

- Implement an interagency workgroup to address technical development of tools listed above and process for development of modeling alternatives.
- Provide resources to address technical issues associated with implementation of real time/forecasting.
- Establish procedures for agency data providers to provide QA/QC data in real time.
- Establish redundancy for monitoring equipment at key locations.
- Conduct periodic workshops through the Bay-Delta Modeling Forum to address forecasting modeling issues.